

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

DETMOL-BIO.A

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/mixture

Pesticide

### 1.3. Details of the supplier of the safety data sheet

Company name: FROWEIN GmbH & Co. KG

Street: Am Reislebach 83

Place: D-72461 Albstadt

Telephone: +49 (0) 74 32-956 - 0

Telefax: +49 (0) 74 32-956 - 138

Responsible for the safety data sheet: sds@gbk-ingelheim.de

1.4. Emergency telephone number: INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)  
England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24  
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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Indications of danger: N - Dangerous for the environment

R phrases:

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

Very toxic to aquatic life with long lasting effects.

### 2.2. Label elements

#### Hazard components for labelling

Tetramethrin

Permethrin (ISO)

Signal word: Warning

Pictograms: GHS09



#### Hazard statements

H410 Very toxic to aquatic life with long lasting effects.

#### Precautionary statements

P102 Keep out of reach of children.

P101 If medical advice is needed, have product container or label at hand.

P260 Do not breathe spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container to in accordance with local and national regulations.

#### Special labelling of certain mixtures

EUH208 Contains Permethrin (ISO). May produce an allergic reaction.

### **2.3. Other hazards**

Not known.

## **SECTION 3: Composition/information on ingredients**

### **3.2. Mixtures**

#### **Chemical characterization**

Aqueous solution

#### **Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
258-067-9	Permethrin (ISO)	
52645-53-1	Xn - Harmful, N - Dangerous for the environment R20/22-43-50-53	0,5 %
613-058-00-2	Acute Tox. 4, Acute Tox. 4, Skin Sens. 1, Aquatic Acute 1 (M-Factor = 1000), Aquatic Chronic 1 (M-Factor = 1000); H332 H302 H317 H400 H410	
231-711-6	Tetramethrin	0,2 %
7696-12-0	N - Dangerous for the environment R50-53	
	Aquatic Chronic 1 (M-Factor = 10); H410	

Full text of R, H and EUH phrases: see section 16.

## **SECTION 4: First aid measures**

### **4.1. Description of first aid measures**

#### **General information**

Remove contaminated soaked clothing immediately.

If you feel unwell, seek medical advice.

#### **After inhalation**

Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.

In the event of symptoms refer for medical treatment.

#### **After contact with skin**

Wash off immediately with plenty of water and soap for at least 15 minutes.

Consult a doctor if skin irritation persists.

#### **After contact with eyes**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Consult (eye) doctor immediately.

#### **After ingestion**

Immediately give plenty of water (if possible charcoal slurry).

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

### **4.2. Most important symptoms and effects, both acute and delayed**

Contact with eyes, skin or oral tissues may cause irritation.

Occasionally literature hints report that contact with Pyrethrum compounds may trigger hay fever similar reactions in particularly sensible persons.

Skin contact with this product may cause cauterisation or prickling sensation without visible skin irritation.

Such an effect is to be considered a warning. Further exposure is strictly to be avoided. If symptoms do not subside, or other symptoms should appear, seek medical advice.

### **4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptoms.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Foam, carbon dioxide (CO<sub>2</sub>), dry chemical, water-spray.  
Product does not burn, fire-extinguishing activities according to surrounding.

#### **Unsuitable extinguishing media**

Full water jet.

#### **5.2. Special hazards arising from the substance or mixture**

Fire may produce:  
Carbon monoxide and carbon dioxide

#### **5.3. Advice for firefighters**

Wear self-contained breathing apparatus and protective suit.

#### **Additional information**

Cool containers at risk with water spray jet.  
Do not release chemically contaminated water into drains, soil or surface waters. Sufficient measures must be taken to retain water used for extinguishing.

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### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.  
Use personal protective clothing.  
Avoid contact with skin, eyes and clothing.

#### **6.2. Environmental precautions**

Do not discharge into the drains/surface waters/ground water.  
Do not discharge into the subsoil/soil.

#### **6.3. Methods and material for containment and cleaning up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).  
Shovel into suitable container for disposal.

#### **6.4. Reference to other sections**

Observe protective instructions (see Sections 7 and 8).  
Information for disposal see section 13.

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### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Keep container tightly closed.  
Avoid contact with skin, eyes and clothing.  
Do not breathe vapours or spray mist.

##### **Advice on protection against fire and explosion**

No special protective measures against fire required.

#### **7.2. Conditions for safe storage, including any incompatibilities**

##### **Requirements for storage rooms and vessels**

Keep container tightly closed in a dry, cool and well-ventilated place.  
Keep from freezing.

##### **Advice on storage compatibility**

No materials to be especially mentioned.

##### **Further information on storage conditions**

Keep away from food, drink and animal feeding stuffs.

#### **7.3. Specific end use(s)**

Pesticide

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### **SECTION 8: Exposure controls/personal protection**

#### **8.1. Control parameters**

#### **8.2. Exposure controls**

#### **Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas.

#### **Protective and hygiene measures**

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke.

Take off immediately all contaminated clothing.

Avoid contact with skin, eyes and clothing.

Do not breath vapours or spray mist.

#### **Eye/face protection**

Tightly fitting goggles (EN 166).

#### **Hand protection**

Use multipurpose protective gloves (plant protection) when spreading/handling the product (EN 374).

#### **Skin protection**

Long sleeved clothing (EN 368).

#### **Respiratory protection**

Use protective face mask with A1-P3 (40 ASt) filter when spraying (EN 14387).

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### **SECTION 9: Physical and chemical properties**

#### **9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	clear
Odour:	characteristic
Flash point:	n.a.
Lower explosion limits:	n.a.
Upper explosion limits:	
Density (at 20 °C):	1,0 g/cm³
Water solubility: (at 20 °C)	Miscible
Ignition temperature:	n.a.

#### **9.2. Other information**

No data available.

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### **SECTION 10: Stability and reactivity**

#### **10.1. Reactivity**

No decomposition if stored and applied as directed.

#### **10.2. Chemical stability**

Stable under normal conditions.

#### **10.3. Possibility of hazardous reactions**

No hazardous reactions known.

#### **10.4. Conditions to avoid**

To avoid thermal decomposition, do not overheat.

#### **10.5. Incompatible materials**

No materials to be especially mentioned.

#### **10.6. Hazardous decomposition products**

Carbon monoxide and carbon dioxide

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### **SECTION 11: Toxicological information**

#### **11.1. Information on toxicological effects**

##### **Acute toxicity**

Based on available data, the classification criteria are not met.

No toxicological data available.

#### **Irritation and corrosivity**

Based on available data, the classification criteria are not met.

#### **Sensitising effects**

Based on available data, the classification criteria are not met.

#### **STOT-single exposure**

Based on available data, the classification criteria are not met.

#### **Severe effects after repeated or prolonged exposure**

Based on available data, the classification criteria are not met.

#### **Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

#### **Aspiration hazard**

Based on available data, the classification criteria are not met.

#### **Additional information on tests**

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

#### **Practical experience**

#### **Other observations**

Contact with eyes, skin or oral tissues may cause irritation.

Occasionally literature hints report that contact with Pyrethrum compounds may trigger hay fever similar reactions in particularly sensible persons.

Skin contact with this product may cause cauterisation or prickling sensation without visible skin irritation.

Such an effect is to be considered a warning. Further exposure is strictly to be avoided. If symptoms do not subside, or other symptoms should appear, seek medical advice.

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## **SECTION 12: Ecological information**

### **12.1. Toxicity**

Tetramethrin:

LC50/Brachydanio rerio/96 h = 33 µg/l

EC50/Daphnia magna/48 h = 0,47 mg/l

EbC50/Scenedesmus subspicatus/72 h > 1,36 mg/l

Very toxic to aquatic life with long lasting effects.

Toxic to bees. (Tetramethrin)

### **12.2. Persistence and degradability**

No data available.

### **12.3. Bioaccumulative potential**

No data available.

### **12.4. Mobility in soil**

No data available.

### **12.5. Results of PBT and vPvB assessment**

No data available.

### **12.6. Other adverse effects**

Hazardous water pollutant.

#### **Further information**

Do not flush into surface water or sanitary sewer system.

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## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

#### **Advice on disposal**

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

**Waste disposal number of waste from residues/unused products**

200119 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); pesticides  
Classified as hazardous waste.

**Waste disposal number of contaminated packaging**

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances  
Classified as hazardous waste.

**Contaminated packaging**

Re-using the polluted packaging materials is not allowed.

Contaminated packagings are to be treated like the product itself.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number:**

UN3082

**14.2. UN proper shipping name:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Permethrin (ISO))

**14.3. Transport hazard class(es):**

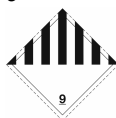
9

**14.4. Packing group:**

III

Hazard label:

9



Classification code:

M6

Limited quantity:

5 L / 30 kg

Transport category:

3

Hazard No:

90

Tunnel restriction code:

E

**Inland waterways transport (ADN)**

**14.1. UN number:**

UN3082

**14.2. UN proper shipping name:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Permethrin (ISO))

**14.3. Transport hazard class(es):**

9

**14.4. Packing group:**

III

Hazard label:

9



Classification code:

M6

Limited quantity:

5 L / 30 kg

**Marine transport (IMDG)**

**14.1. UN number:**

UN3082

**14.2. UN proper shipping name:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Permethrin)

**14.3. Transport hazard class(es):**

9

**14.4. Packing group:**

III

Hazard label:

9



Marine pollutant:

Yes

Limited quantity: 5 L / 30 kg  
EmS: F-A, S-F

**Air transport (ICAO)**

**14.1. UN number:** UN3082

**14.2. UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Permethrin)

**14.3. Transport hazard class(es):** 9

**14.4. Packing group:** III

Hazard label: 9



Limited quantity Passenger: Y964 / 30 kg G

IATA-packing instructions - Passenger:	964
IATA-max. quantity - Passenger:	450 L
IATA-packing instructions - Cargo:	964
IATA-max. quantity - Cargo:	450 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: yes



**14.6. Special precautions for user**

Handle in accordance with good industrial hygiene and safety practice.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

The transport takes place only in approved and appropriate packaging.

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU regulatory information**

1999/13/EC (VOC): 0 %

**National regulatory information**

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Biocide registry number: BAuA-Reg. Nr. N-35244

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

**SECTION 16: Other information**

**Abbreviations and acronyms**

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

**Relevant R phrases (number and full text)**

20/22 Harmful by inhalation and if swallowed.

43 May cause sensitisation by skin contact.

50 Very toxic to aquatic organisms.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

53 May cause long-term adverse effects in the aquatic environment.

**Relevant H and EUH statements (number and full text)**

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

EUH208 Contains Permethrin (ISO). May produce an allergic reaction.

**Further Information**

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*